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(54) Title: **METHOD OF PREPARATION OF A FUNGAL GLUCANE HYDROGEL HAVING ANTIBACTERIAL AND IMMUNOSTIMULANT ACTIVITY, AND USE THEREOF**

(57) Abstract: A method of preparation of a fungal glucane hydrogel having antibacterial and immunostimulant activity by alkaline deproteinization and subsequent elimination of water-soluble components consists in that the obtained insoluble glucan is subsequently hydrated by wet grinding at a rotational speed of 3000 to 9000 rpm for 10 to 20 min. to a swelling volume in water of 50 to 500 ml/g. Then it is adjusted by heat sterilization at a temperature of 90 to 110 °C for 20 to 30 min., what results in a gel which is formed by fungal polysaccharide with the β-(1,3)-D-bond in the principal chain, with a concentration of 0.5 to 3 % by weight. The fungal glucane hydrogel may be utilized for preparation of cosmetical, pharmaceutical and foodstuff products.